42-045-00070

Monroe Energy, LLC
4101 Post Road
Trainer, PA 19061
(610) 364-8000

January 29, 2014

Via FedEx 7977 0389 7027

Mr. James Rebarchak
Commonwealth of Pennsylvania
Department of Environmental Protection
Southeast Regional Office
2 East Main Street
Norristown, PA 19401

Re: Monroe Energy, LLC – Trainer Refinery
40 CFR 63, Subpart UUU: Semi-Annual Periodic Report
40 CFR 60, NSPS J: Semi-Annual Report
Reporting Period: July 1 – December 31, 2013

Dear Mr. Rebarchak:

In accordance with 40 CFR 63 Subpart UUU - National Emission Standards for Hazardous Air Pollutants for Petroleum Refineries: Catalytic Cracking Units, Catalytic Reforming Units and Sulfur Recovery Plants, Monroe Energy, LLC's Trainer Refinery hereby submits this semi-annual compliance report (per §63.1575(b)(2)) for the period beginning July 1, 2013 and ending December 31, 2013. This report is also being submitted in compliance with 40 CFR 60.107(d), (e) and (f) and 40 CFR 60.7 (c) for the continuous monitoring systems required by the New Source Performance Standards (NSPS) for the North Side and South Side refinery fuel gas systems that are continuously monitored for H_2S, Sulfur Recovery Unit (SRU) for SO_2, and the Fluid Catalytic Cracking Unit (FCCU) for PM, CO, and SO_2.

Please note that the Refinery's Main Flare and Sour Gas Flare accepted NSPS J applicability on July 1, 2013, pursuant to the Refinery's Consent Decree (Civil Action H-05-0258). On October 1, 2013, the Refinery submitted data to the Pennsylvania Department of Environmental Protection (PADEP) certifying the performance of the H_2S CEMS associated with these flares.

Based upon information and belief formed after a reasonable inquiry, I, as a responsible official of the above-mentioned facility, certify the information contained in this report is accurate and true to the best of my knowledge.

Should you have any questions or comments regarding this report, please contact Mr. Matt Torell, Environmental Leader, at (610) 364-8090.

Sincerely,
MONROE ENERGY, LLC

Jeffrey K. Warmann
CEO & President

Enclosure

cc: Matt Torell (Monroe)

Via FedEx: 7977 0394 6235
U.S. EPA, Region III
Director, Air Protection Division
Mail Code 3AP00
1650 Arch Street
Philadelphia, Pa 19103-2029

MONROE ENERGY, LLC
TRAINER REFINERY

SEMIANNUAL PERIODIC REPORT
Reporting Period: July 1, 2013 – December 31, 2013

The Refinery MACT 2 emission standards (40 CFR 63 Subpart UUU - National Emission Standards for Hazardous Air Pollutants for Petroleum Refineries: Catalytic Cracking Units, Catalytic Reforming Units and Sulfur Recovery Plants) regulate the following refinery affected sources:

1. Fluidized Catalytic Cracking Unit (FCCU – Source ID 101)
2. Catalytic Reforming Unit (Platformer Unit – Source ID 119)
3. Sulfur Recovery Unit (SRU – Source ID 102)
4. Each Bypass line serving the above units that could divert an affected vent stream away from a control device used to comply with the requirements of this subpart.

This semi-annual report for the period beginning July 1, 2013 and ending December 31, 2013 addresses the status of facility compliance with Subpart UUU.

COMPLIANCE STATUS: 40 CFR 63 SUBPART UUU

1. FCCU:

[§63. 1564-1565]

The refinery operates one FCCU. On November 22, 2005 the facility received approval from U.S. EPA for an Alternative Monitoring Plan (AMP) in lieu of the requirement to install and operate a Continuous Opacity Monitoring (COM) System on the FCCU wet gas scrubber (WGS) stack. The AMP requires the refinery to monitor WGS liquid-to-gas ratio to continuously demonstrate compliance with the limits established during performance testing conducted in 2006 and 2007.

The average liquid-to-gas ratio was calculated for each operating hour during the period from July 1 to December 31, 2013. The L-to-G ratio was above the minimum ratio of 0.08 gal/scf established during the 2007 performance test (i.e., there were no deviations during the reporting period).

For the reporting period (July 1 to December 31, 2013), the FCCU was in compliance with the Refinery MACT 2 requirements with one deviation, noted below.

As required under §63.1575(d) and (e), the following information is provided for the FCCU for the period July 1, 2013 to December 31, 2013:

(d)(1) The total operating time of each affected source during the reporting period: All 184 days available in this period.

(d)(2) Information on the number, duration, and cause of deviations (including unknown cause, if applicable), as applicable, and the corrective action taken: One reportable event occurred during the reporting period. The completed SSM form is included in attachment A.

- The event occurred 11/01/2013 22:00

  Substation No. 3 malfunctioned causing the Water Supply Pump House to lose power. The pump house was unable to supply the FCCU with cooling water and therefore the FCCU had to be transitioned to hot circulation. As the FCCU was being transitioned from fresh feed to hot circulation its CO emission limit of 500ppmvd @ 0% O_2 (1-hr average) was exceeded.

(d)(3) Information on the number, duration, and cause for monitor downtime incidents (including unknown cause, if applicable, other than downtime associated with zero and span and other daily calibration checks): See attached Table 1.

(e)(1) The date and time that each malfunction started and stopped:

- Event 1: November 1, 2013 22:00 until November 1, 2013 23:59

(e)(2) The date and time that each continuous opacity monitoring system or continuous emission monitoring system was inoperative, except for zero (low-level) and high-level checks: See attached Table 1.

(e)(3) The date and time that each continuous opacity monitoring system or continuous emission monitoring system was out-of-control, including the information in §63.8(c)(8): See attached Table 1 and Attachment A.

(e)(4) The date and time that each deviation started and stopped, and whether each deviation occurred during a period of startup, shutdown, or malfunction or during another period:

- Event 1: November 1, 2013 22:00 until November 1, 2013 23:59

(e)(5) A summary of the total duration of the deviation during the reporting period (recorded in minutes for opacity and hours for gases and in the averaging period specified in the regulation for other types of emission limitations), and the total duration as a percent of the total source operating time during that reporting period: The total duration of deviations is 2 hours which is 0.05% of the operating time.

(e)(6) A breakdown of the total duration of the deviations during the reporting period and into those that are due to startup, shutdown, control equipment problems, process problems, other known causes, and other unknown causes:

- Startup, shutdown: 2 hours
- Control equipment problems: 0 hours
- Process problems: 2 hours
- Other known causes: 0 hours
- Other unknown causes: 0 hours

(e)(7) A summary of the total duration of downtime for the continuous opacity monitoring system or continuous emission monitoring system during the reporting period (recorded in minutes for opacity and hours for gases and in the averaging time specified in the regulation for other types of standards), and the total duration of downtime for the continuous opacity monitoring system or continuous emission monitoring system as a percent of the total source operating time during that reporting period: See attached Table 1.

(e)(8) A breakdown of the total duration of downtime for the continuous opacity monitoring system or continuous emission monitoring system during the reporting period into periods that are due to monitoring equipment malfunctions, non-monitoring equipment malfunctions, quality assurance/quality control calibrations, other known causes, and other unknown causes: See attached Table 1.

(e)(9) An identification of each HAP that was monitored at the affected source: CO is monitored as a surrogate for organic HAPs.

(e)(10) A brief description of the process units:

The Fluidized Catalytic Cracking Unit (FCCU) is a refinery process unit used for the production of gasoline. Heavy oil, which is used as the feedstock, is catalytically cracked in a fluidized catalyst bed to produce C3 olefins, C4 olefins and isobutanes. In the cracking reactor, heavy carbonaceous materials (coke) become deposited on the catalyst, requiring continuous regeneration. The catalyst is circulated to a fluidized bed regenerator where these deposits are combusted. Most of the catalyst particles entrained in the regenerator flue gas are then removed in two stages of cyclones within the regenerator vessel and then are returned to the fluidized bed reactor.

At the Trainer Refinery, the FCCU control devices include a CO Boiler for CO reduction, an Enhanced Selective Non-Catalytic Reduction (eSNCR) unit for NO_x reduction, an electrostatic precipitator for PM reduction and a wet gas scrubber for PM and SO_2 reduction.

(e)(11) The monitoring equipment manufacturer(s) and model number(s): SO_2 Analyzer – Ametek Process Instruments, Model 921 Single Gas Analyzer; NOx Analyzer – Ametek

Process Instruments, Model 922 Single Gas Analyzer; CO and O_2 Analyzer – Servomex Company Inc., Model 4900 Analyzer.

(e)(12) The date of the latest certification or audit for the continuous gas analysis system or continuous emission monitoring system: Annual RATA conducted on the SO2 and O2 monitors November 22, 2013.

(e)(13) A description of any change in the continuous emission monitoring system or continuous opacity monitoring system, processes, or controls since the last reporting period: Not Applicable.

2. Platformer Unit **[§63.1566-1567]**

The refinery operates one Catalytic Reforming Unit. As required by Subpart UUU, the refinery collects catalyst samples at the inlet and outlet of the Chlorsorb unit in accordance with their operations, maintenance and monitoring plan. The facility's operating permit requires that the weekly average chloride concentration of the samples at the inlet be less than 1.35% by weight and at the outlet be less than 1.80%. During this reporting period there were two (2) deviations noted. During the weeks 06/30/2013 – 07/06/2013 and 07/14/2013 – 07/20/2013, more than the required number of catalyst samples were taken; however, the sample frequency did not occur on alternate operating days, as required by the Refinery's Operation, Monitoring, and Maintenance Plan (OMMP). The Pennsylvania Department of Environmental Protection (PADEP) issued a Notice of Violation (NOV) to the Refinery on 08/02/2013 for not sampling catalyst in accordance with the Refinery's OMMP. As required by the NOV, the Refinery prepared and implemented a Corrective Action Plan to ensure that catalyst sampling frequency occurs in accordance with the Refinery's OMMP. There were no other deviations noted during this reporting period.

Also, as part of the Subpart UUU requirements, the refinery is required to monitor the vent gas temperature at the inlet to the Chlorsorb unit and demonstrate that the daily average temperature has not exceeded the maximum temperature demonstrated during the 2006 performance test. For the period July 1, 2013 to December 31, 2013, the Platformer vent gas to the Chlorsorb unit was monitored continuously and the daily average temperature during the reporting period did not exceed the maximum allowable inlet temperature of 350 deg. F when the Platformer Regenerator was operating.

3. SRU **[§63.1568]**

The refinery operates two Sulfur Recovery Units. The required SO_2 and O_2 Continuous Emissions Monitoring System (CEMS) were installed in April 2005 and have been in operation since installation.

As required under §63.1575(d) and (e), information must be provided for any deviation of the emission limitation for the SRU: During this reporting there were no deviations reported; therefore, no additional information is provided.

4. Bypass Lines **[§63.1569]**

The FCCU does not have any bypass lines. The Platformer Chlorsorb Unit was not bypassed during this reporting period. The Sulfur Recovery Unit was not bypassed during this reporting period.

5. Start-up, Shutdown, and Malfunction Plans (SSMP) **[§63.10(d)(5)]**

Any startup, shutdown, and malfunction at the Facility which occurred during the reporting period were managed consistent with the facility's SSMP. A record of the malfunction events and copies of the event notification letters, if any, to PADEP are provided in Attachment A.

Table 1: Downtime Events

TABLE 1
Downtime Events - Duration

Plant: MONROE ENERGY, LLC.
Report Period: 07/01/2013 00:00 Through 12/31/2013 23:59
Time Online Criteria: 1 minute(s)

Source: SRUSTACK
Parameter: SO2PPMC
Interval: 001H

Operating Hours: 4,413.58

Incident ID	Start Date/Time	End Date/Time	Duration (hours)	Reason Code - Description Action Code - Description
1	07/23/2013 13:00	07/23/2013 13:59	1.00	08 - NORMAL OPERATION 16 - PRIMARY ANALYZER MALFUNCTION
Comments: Power Failure				
2	08/30/2013 11:00	08/30/2013 13:59	3.00	08 - NORMAL OPERATION 14 - RECALIBRATION
Comments: 3Q2013 SO2 (ppm) Linearity Test				
3	08/31/2013 09:00	08/31/2013 10:59	2.00	08 - NORMAL OPERATION 14 - RECALIBRATION
Comments: 3Q2013 O2 (%) Linearity Test				
4	12/03/2013 08:00	12/03/2013 14:59	7.00	08 - NORMAL OPERATION 12 - EXCESS DRIFT ANCILLARY ANALYZER
5	12/12/2013 11:00	12/12/2013 14:59	4.00	08 - NORMAL OPERATION 14 - RECALIBRATION
Comments: 4Q2013 SO2 (ppm) & O2 (%) Linearity Test				
6	12/21/2013 08:00	12/21/2013 08:59	1.00	08 - NORMAL OPERATION 14 - RECALIBRATION
		Number of Events:	6	
		Total Duration:	18.00 hours	

CMS Performance Summary	
1. CMS downtime in the reporting period due to:	
a. Monitor equipment malfunctions	8
b. Non-Monitor equipment malfunctions	0
c. Quality assurance calibration	10
d. Other known causes	0
e. Unknown causes	0
2. Total CMS Downtime	**18**
3. [Total CMS Downtime] x (100) / [Total source operating time]	**0.4%**

* Indicates duration incident could have additional data prior to the start date or following the end date.
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TABLE 1
Downtime Events - Duration

Plant: MONROE ENERGY, LLC.
Report Period: 07/01/2013 00:00 Through 12/31/2013 23:59
Time Online Criteria: 1 minute(s)

Source: FCCSTACK
Parameter: COPPMC
Interval: 001H

Operating Hours: 4,413.58

Incident ID	Start Date/Time	End Date/Time	Duration (hours)	Reason Code - Description Action Code - Description
24	12/16/2013 09:00	12/16/2013 11:59	3.00	08 - NORMAL OPERATION 14 - RECALIBRATION
Comments: 4Q2013 NOx (ppm) & SO2 (ppm) Linearity Test				
25	12/17/2013 09:00	12/17/2013 10:59	2.00	08 - NORMAL OPERATION 14 - RECALIBRATION
Comments: 4Q2013 O2 (%) Linearity Test				
26	12/29/2013 11:00	12/29/2013 11:59	1.00	08 - NORMAL OPERATION 14 - RECALIBRATION
		Number of Events:	26	
		Total Duration:	69.00 hours	

* Indicates duration incident could have additional data prior to the start date or following the end date.
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TABLE 1
Downtime Events - Duration

Plant: MONROE ENERGY, LLC.
Report Period: 07/01/2013 00:00 Through 12/31/2013 23:59
Time Online Criteria: 1 minute(s)

Source: FCCSTACK
Parameter: NOXPPMC
Interval: 001H

Operating Hours: 4,413.58

Incident ID	Start Date/Time	End Date/Time	Duration (hours)	Reason Code - Description Action Code - Description
1	07/01/2013 07:00	07/01/2013 08:59	2.00	08 - NORMAL OPERATION 11 - EXCESS DRIFT PRIMARY ANALYZER
2	08/27/2013 07:00	08/27/2013 08:59	2.00	08 - NORMAL OPERATION 14 - RECALIBRATION
3	09/16/2013 06:00	09/16/2013 07:59	2.00	08 - NORMAL OPERATION 12 - EXCESS DRIFT ANCILLARY ANALYZER
4	09/17/2013 06:00	09/17/2013 07:59	2.00	08 - NORMAL OPERATION 12 - EXCESS DRIFT ANCILLARY ANALYZER
5	09/17/2013 10:00	09/17/2013 12:59	3.00	08 - NORMAL OPERATION 14 - RECALIBRATION
Comments: 3Q2013 SO2 (ppm) Linearity Test				
6	09/18/2013 06:00	09/18/2013 08:59	3.00	08 - NORMAL OPERATION 12 - EXCESS DRIFT ANCILLARY ANALYZER
7	09/21/2013 06:00	09/21/2013 07:59	2.00	08 - NORMAL OPERATION 11 - EXCESS DRIFT PRIMARY ANALYZER
8	09/22/2013 06:00	09/22/2013 09:59	4.00	08 - NORMAL OPERATION 11 - EXCESS DRIFT PRIMARY ANALYZER
9	09/23/2013 06:00	09/23/2013 14:59	9.00	08 - NORMAL OPERATION 11 - EXCESS DRIFT PRIMARY ANALYZER
10	09/24/2013 06:00	09/24/2013 07:59	2.00	08 - NORMAL OPERATION 11 - EXCESS DRIFT PRIMARY ANALYZER
11	09/24/2013 11:00	09/24/2013 13:59	3.00	08 - NORMAL OPERATION 14 - RECALIBRATION
Comments: 3Q2013 O2 (%) Linearity Test				
12	09/25/2013 09:00	09/25/2013 09:59	1.00	08 - NORMAL OPERATION 20 - CORRECTIVE MAINTENANCE
13	09/26/2013 09:00	09/26/2013 13:59	5.00	08 - NORMAL OPERATION 14 - RECALIBRATION
Comments: 3Q2013 NOx (ppm) & CO (ppm) Linearlty Test				
14	10/12/2013 12:00	10/12/2013 14:59	3.00	08 - NORMAL OPERATION 11 - EXCESS DRIFT PRIMARY ANALYZER
15	10/15/2013 07:00	10/15/2013 07:59	1.00	08 - NORMAL OPERATION 20 - CORRECTIVE MAINTENANCE
16	11/07/2013 11:00	11/07/2013 12:59	2.00	08 - NORMAL OPERATION 20 - CORRECTIVE MAINTENANCE
17	11/07/2013 14:00	11/07/2013 15:59	2.00	08 - NORMAL OPERATION 20 - CORRECTIVE MAINTENANCE
18	11/13/2013 09:00	11/13/2013 09:59	1.00	08 - NORMAL OPERATION 20 - CORRECTIVE MAINTENANCE
19	11/14/2013 08:00	11/14/2013 08:59	1.00	08 - NORMAL OPERATION 11 - EXCESS DRIFT PRIMARY ANALYZER
20	11/16/2013 07:00	11/16/2013 15:59	9.00	08 - NORMAL OPERATION 11 - EXCESS DRIFT PRIMARY ANALYZER
21	11/18/2013 08:00	11/18/2013 14:59	7.00	08 - NORMAL OPERATION 11 - EXCESS DRIFT PRIMARY ANALYZER
22	11/19/2013 08:00	11/19/2013 08:59	1.00	08 - NORMAL OPERATION 11 - EXCESS DRIFT PRIMARY ANALYZER
23	12/16/2013 09:00	12/16/2013 11:59	3.00	08 - NORMAL OPERATION

* Indicates duration incident could have additional data prior to the start date or following the end date.
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TABLE 1
Downtime Events - Duration

Plant: MONROE ENERGY, LLC.
Report Period: 07/01/2013 00:00 Through 12/31/2013 23:59
Time Online Criteria: 1 minute(s)

Source: FCCSTACK
Parameter: NOXPPMC
Interval: 001H

Operating Hours: 4,413.58

Incident ID	Start Date/Time	End Date/Time	Duration (hours)	Reason Code - Description Action Code - Description

CMS Performance Summary

1. CMS downtime in the reporting period due to:	
a. Monitor equipment malfunctions	54
b. Non-Monitor equipment malfunctions	0
c. Quality assurance calibration	19
d. Other known causes	0
e. Unknown causes	0
2. Total CMS Downtime	**73**
3. [Total CMS Downtime] x (100) / [Total source operating time]	**1.7%**

* Indicates duration incident could have additional data prior to the start date or following the end date.

TABLE 1
Downtime Events - Duration

Plant: MONROE ENERGY, LLC.
Report Period: 07/01/2013 00:00 Through 12/31/2013 23:59
Time Online Criteria: 1 minute(s)

Source: FCCSTACK
Parameter: SO2PPMC
Interval: 001H

Operating Hours: 4,413.58

Incident ID	Start Date/Time	End Date/Time	Duration (hours)	Reason Code - Description Action Code - Description
24	11/07/2013 14:00	11/07/2013 15:59	2.00	20 - CORRECTIVE MAINTENANCE 08 - NORMAL OPERATION
25	11/08/2013 07:00	11/08/2013 10:59	4.00	20 - CORRECTIVE MAINTENANCE 08 - NORMAL OPERATION
26	11/11/2013 07:00	11/11/2013 09:59	3.00	11 - EXCESS DRIFT PRIMARY ANALYZER 08 - NORMAL OPERATION
27	11/12/2013 07:00	11/12/2013 08:59	2.00	11 - EXCESS DRIFT PRIMARY ANALYZER 08 - NORMAL OPERATION
28	11/13/2013 07:00	11/13/2013 10:59	4.00	11 - EXCESS DRIFT PRIMARY ANALYZER 08 - NORMAL OPERATION
29	11/14/2013 08:00	11/14/2013 08:59	1.00	11 - EXCESS DRIFT PRIMARY ANALYZER 08 - NORMAL OPERATION
30	11/16/2013 07:00	11/16/2013 15:59	9.00	14 - RECALIBRATION 08 - NORMAL OPERATION
31	11/18/2013 07:00	11/18/2013 14:59	8.00	11 - EXCESS DRIFT PRIMARY ANALYZER 08 - NORMAL OPERATION
32	11/19/2013 08:00	11/19/2013 08:59	1.00	11 - EXCESS DRIFT PRIMARY ANALYZER 08 - NORMAL OPERATION
33	12/03/2013 07:00	12/03/2013 09:59	3.00	14 - RECALIBRATION 08 - NORMAL OPERATION
34	12/15/2013 09:00	12/15/2013 10:59	2.00	11 - EXCESS DRIFT PRIMARY ANALYZER 08 - NORMAL OPERATION
35	12/16/2013 09:00	12/16/2013 11:59	3.00	11 - EXCESS DRIFT PRIMARY ANALYZER 08 - NORMAL OPERATION
Comments: 4Q2013 NOx (ppm) & SO2 (ppm) Linearity Test				14 - RECALIBRATION
36	12/17/2013 09:00	12/17/2013 10:59	2.00	08 - NORMAL OPERATION 14 - RECALIBRATION
Comments: 4Q2013 O2 (%) Linearity Test				
37	12/29/2013 11:00	12/29/2013 11:59	1.00	08 - NORMAL OPERATION 14 - RECALIBRATION
		Number of Events:	37	
		Total Duration:	144.00 hours	

* Indicates duration incident could have additional data prior to the start date or following the end date.
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TABLE 1
Downtime Events - Duration

Plant: MONROE ENERGY, LLC.
Report Period: 07/01/2013 00:00 Through 12/31/2013 23:59
Time Online Criteria: 1 minute(s)

Source: N_H2S
Parameter: N_H2S
Interval: 001H

Operating Hours: 4,415.15

Incident ID	Start Date/Time	End Date/Time	Duration (hours)	Reason Code - Description Action Code - Description
1	07/18/2013 09:00	07/18/2013 09:59	1.00	08 - NORMAL OPERATION 14 - RECALIBRATION
2	07/23/2013 07:00	07/23/2013 07:59	1.00	08 - NORMAL OPERATION 14 - RECALIBRATION
3	07/23/2013 13:00	07/23/2013 13:59	1.00	08 - NORMAL OPERATION 14 - RECALIBRATION
4	08/09/2013 06:00	08/09/2013 06:59	1.00	08 - NORMAL OPERATION 14 - RECALIBRATION
5	08/19/2013 07:00	08/19/2013 07:59	1.00	08 - NORMAL OPERATION 14 - RECALIBRATION
6	08/20/2013 07:00	08/20/2013 07:59	1.00	08 - NORMAL OPERATION 14 - RECALIBRATION
7	08/22/2013 07:00	08/22/2013 07:59	1.00	08 - NORMAL OPERATION 14 - RECALIBRATION
8	08/28/2013 07:00	08/28/2013 07:59	1.00	08 - NORMAL OPERATION 14 - RECALIBRATION
9	08/29/2013 07:00	08/29/2013 07:59	1.00	08 - NORMAL OPERATION 14 - RECALIBRATION
10	09/04/2013 08:00	09/04/2013 08:59	1.00	08 - NORMAL OPERATION 14 - RECALIBRATION
11	09/05/2013 06:00	09/05/2013 07:59	2.00	08 - NORMAL OPERATION 11 - EXCESS DRIFT PRIMARY ANALYZER
12	09/10/2013 06:00	09/10/2013 06:59	1.00	08 - NORMAL OPERATION 14 - RECALIBRATION
13	09/11/2013 10:00	09/11/2013 10:59	1.00	08 - NORMAL OPERATION 14 - RECALIBRATION
14	09/11/2013 13:00	09/11/2013 13:59	1.00	08 - NORMAL OPERATION 14 - RECALIBRATION
15	09/12/2013 08:00	09/12/2013 09:59	2.00	08 - NORMAL OPERATION 14 - RECALIBRATION
Comments: 3Q2013 N_H2S (ppm) Linearity Test				
16	10/01/2013 11:00	10/01/2013 11:59	1.00	08 - NORMAL OPERATION 14 - RECALIBRATION
17	10/02/2013 06:00	10/02/2013 07:59	2.00	08 - NORMAL OPERATION 11 - EXCESS DRIFT PRIMARY ANALYZER
18	11/08/2013 01:00	11/08/2013 01:59	1.00	08 - NORMAL OPERATION 14 - RECALIBRATION
19	11/08/2013 06:00	11/08/2013 06:59	1.00	08 - NORMAL OPERATION 14 - RECALIBRATION
20	11/09/2013 06:00	11/09/2013 09:59	4.00	08 - NORMAL OPERATION 14 - RECALIBRATION
21	11/10/2013 06:00	11/10/2013 06:59	1.00	08 - NORMAL OPERATION 14 - RECALIBRATION
22	11/11/2013 06:00	11/11/2013 06:59	1.00	08 - NORMAL OPERATION 14 - RECALIBRATION
23	11/12/2013 06:00	11/12/2013 06:59	1.00	08 - NORMAL OPERATION 14 - RECALIBRATION
24	11/13/2013 06:00	11/13/2013 06:59	1.00	08 - NORMAL OPERATION

* Indicates duration incident could have additional data prior to the start date or following the end date.
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TABLE 1
Downtime Events - Duration
Plant: MONROE ENERGY, LLC.
Report Period: 07/01/2013 00:00 Through 12/31/2013 23:59
Time Online Criteria: 1 minute(s)

Source: S_H2S
Parameter: S_H2S
Interval: 001H
Operating Hours: 4,415.15

Incident ID	Start Date/Time	End Date/Time	Duration (hours)	Reason Code - Description Action Code - Description
1	07/04/2013 11:00	07/04/2013 11:59	1.00	08 - NORMAL OPERATION 14 - RECALIBRATION
2	07/06/2013 06:00	07/06/2013 07:59	2.00	08 - NORMAL OPERATION 11 - EXCESS DRIFT PRIMARY ANALYZER
3	07/23/2013 13:00	07/23/2013 13:59	1.00	08 - NORMAL OPERATION 14 - RECALIBRATION
4	08/26/2013 06:00	08/26/2013 08:59	3.00	08 - NORMAL OPERATION 11 - EXCESS DRIFT PRIMARY ANALYZER
5	08/27/2013 06:00	08/27/2013 06:59	1.00	08 - NORMAL OPERATION 11 - EXCESS DRIFT PRIMARY ANALYZER
6	09/07/2013 06:00	09/07/2013 10:59	5.00	08 - NORMAL OPERATION 11 - EXCESS DRIFT PRIMARY ANALYZER
7	09/17/2013 07:00	09/17/2013 08:59	2.00	08 - NORMAL OPERATION 14 - RECALIBRATION
Comments: 3Q2013 S_H2S (ppm) Linearity Test				
8	10/30/2013 06:00	10/30/2013 08:59	3.00	08 - NORMAL OPERATION 11 - EXCESS DRIFT PRIMARY ANALYZER
9	11/02/2013 06:00	11/02/2013 10:59	5.00	08 - NORMAL OPERATION 11 - EXCESS DRIFT PRIMARY ANALYZER
10	11/03/2013 06:00	11/03/2013 16:59	11.00	08 - NORMAL OPERATION 11 - EXCESS DRIFT PRIMARY ANALYZER
11	11/08/2013 02:00	11/08/2013 02:59	1.00	08 - NORMAL OPERATION 14 - RECALIBRATION
12	12/10/2013 10:00	12/10/2013 10:59	1.00	08 - NORMAL OPERATION 14 - RECALIBRATION
Comments: 4Q2013 H2S (ppm) Linearity Test				
13	12/13/2013 07:00	12/13/2013 08:59	2.00	08 - NORMAL OPERATION 11 - EXCESS DRIFT PRIMARY ANALYZER
14	12/26/2013 07:00	12/26/2013 09:59	3.00	08 - NORMAL OPERATION 11 - EXCESS DRIFT PRIMARY ANALYZER
15	12/27/2013 07:00	12/27/2013 13:59	7.00	08 - NORMAL OPERATION 11 - EXCESS DRIFT PRIMARY ANALYZER
16	12/28/2013 07:00	12/28/2013 13:59	7.00	08 - NORMAL OPERATION 11 - EXCESS DRIFT PRIMARY ANALYZER
17	12/29/2013 10:00	12/29/2013 11:59	2.00	08 - NORMAL OPERATION 14 - RECALIBRATION
		Number of Events:	17	
		Total Duration:	57.00 hours	

CMS Performance Summary

1. CMS downtime in the reporting period due to:	
a. Monitor equipment malfunctions	49
b. Non-Monitor equipment malfunctions	0
c. Quality assurance calibration	8
d. Other known causes	0
e. Unknown causes	0
2. Total CMS Downtime	**57**
3. [Total CMS Downtime] x (100) / [Total source operating time]	**1.29%**

* Indicates duration incident could have additional data prior to the start date or following the end date.
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TABLE 1
Downtime Events - Duration

Plant: MONROE ENERGY, LLC.
Report Period: 07/01/2013 00:00 Through 12/31/2013 23:59
Time Online Criteria: 1 minute(s)

Source: FLARE
Parameter: H2SCONC
Interval: 001H

Operating Hours: 4,416

Incident ID	Start Date/Time	End Date/Time	Duration (hours)	Reason Code - Description Action Code - Description
17	09/16/2013 15:00	09/16/2013 15:59	1.00	09 - OTHER 14 - RECALIBRATION
Comments: H2S (ppm) Cycle Time Test [INITIAL CERTIFICATION]				
18	09/20/2013 05:00	09/20/2013 08:59	4.00	08 - NORMAL OPERATION 11 - EXCESS DRIFT PRIMARY ANALYZER
19	09/22/2013 05:00	09/22/2013 22:59	18.00	08 - NORMAL OPERATION 11 - EXCESS DRIFT PRIMARY ANALYZER
20	10/14/2013 04:00	10/14/2013 09:59	6.00	08 - NORMAL OPERATION 11 - EXCESS DRIFT PRIMARY ANALYZER
21	10/18/2013 04:00	10/18/2013 14:59	11.00	08 - NORMAL OPERATION 11 - EXCESS DRIFT PRIMARY ANALYZER
22	10/19/2013 04:00	10/19/2013 09:59	6.00	08 - NORMAL OPERATION 11 - EXCESS DRIFT PRIMARY ANALYZER
23	10/22/2013 04:00	10/22/2013 13:59	10.00	08 - NORMAL OPERATION 11 - EXCESS DRIFT PRIMARY ANALYZER
24	10/27/2013 04:00	10/27/2013 10:59	7.00	08 - NORMAL OPERATION 11 - EXCESS DRIFT PRIMARY ANALYZER
25	10/28/2013 05:00	10/28/2013 16:59	12.00	08 - NORMAL OPERATION 11 - EXCESS DRIFT PRIMARY ANALYZER
26	11/04/2013 05:00	11/04/2013 11:59	7.00	08 - NORMAL OPERATION 11 - EXCESS DRIFT PRIMARY ANALYZER
27	11/06/2013 11:00	11/06/2013 14:59	4.00	08 - NORMAL OPERATION 11 - EXCESS DRIFT PRIMARY ANALYZER
28	11/10/2013 05:00	11/10/2013 11:59	7.00	08 - NORMAL OPERATION 11 - EXCESS DRIFT PRIMARY ANALYZER
29	11/30/2013 05:00	11/30/2013 09:59	5.00	08 - NORMAL OPERATION 11 - EXCESS DRIFT PRIMARY ANALYZER
30	12/04/2013 05:00	12/04/2013 10:59	6.00	08 - NORMAL OPERATION 11 - EXCESS DRIFT PRIMARY ANALYZER
31	12/11/2013 13:00	12/11/2013 18:59	6.00	08 - NORMAL OPERATION 14 - RECALIBRATION
Comments: 4Q2013 H2S (ppm) Linearity Test				
32	12/16/2013 05:00	12/17/2013 12:59	32.00	08 - NORMAL OPERATION 11 - EXCESS DRIFT PRIMARY ANALYZER
33	12/26/2013 05:00	12/26/2013 09:59	5.00	08 - NORMAL OPERATION 11 - EXCESS DRIFT PRIMARY ANALYZER
34	12/30/2013 05:00	12/30/2013 10:59	6.00	08 - NORMAL OPERATION 11 - EXCESS DRIFT PRIMARY ANALYZER
		Number of Events:	34	
		Total Duration:	562.00 hours	

* Indicates duration incident could have additional data prior to the start date or following the end date.
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TABLE 1
Downtime Events - Duration

Plant: MONROE ENERGY, LLC.
Report Period: 07/01/2013 00:00 Through 12/31/2013 23:59
Time Online Criteria: 1 minute(s)

Source: SRUFLARE
Parameter: H2SCONC
Interval: 001H

Operating Hours: 4,416

Incident ID	Start Date/Time	End Date/Time	Duration (hours)	Reason Code - Description Action Code - Description
1 *	07/01/2013 00:00	08/19/2013 13:59	1,190.00	08 - NORMAL OPERATION 11 - EXCESS DRIFT PRIMARY ANALYZER
Comments: Sour Gas Flare H2S (ppm) CEMS not Certified				
2	08/28/2013 06:00	08/28/2013 15:59	10.00	08 - NORMAL OPERATION 11 - EXCESS DRIFT PRIMARY ANALYZER
Comments: Sour Gas Flare H2S (ppm) CEMS not Certified				
3	08/29/2013 11:00	08/29/2013 12:59	2.00	08 - NORMAL OPERATION 11 - EXCESS DRIFT PRIMARY ANALYZER
Comments: Sour Gas Flare H2S (ppm) CEMS not Certified				
4	08/30/2013 06:00	08/30/2013 13:59	8.00	08 - NORMAL OPERATION 11 - EXCESS DRIFT PRIMARY ANALYZER
Comments: Sour Gas Flare H2S (ppm) CEMS not Certified				
5	09/05/2013 12:00	09/05/2013 15:59	4.00	08 - NORMAL OPERATION 14 - RECALIBRATION
Comments: 3Q2013 H2S (ppm) Linearity Test [INITIAL CERTIFICATION]				
6	09/06/2013 10:00	09/06/2013 10:59	1.00	08 - NORMAL OPERATION 14 - RECALIBRATION
Comments: H2S (ppm) Cycle Time Test [INITIAL CERTIFICATION]				
7	09/20/2013 05:00	09/20/2013 09:59	5.00	08 - NORMAL OPERATION 11 - EXCESS DRIFT PRIMARY ANALYZER
8	10/06/2013 05:00	10/06/2013 13:59	9.00	08 - NORMAL OPERATION 11 - EXCESS DRIFT PRIMARY ANALYZER
9	10/08/2013 07:00	10/08/2013 07:59	1.00	08 - NORMAL OPERATION 14 - RECALIBRATION
10	10/17/2013 12:00	10/17/2013 15:59	4.00	08 - NORMAL OPERATION 14 - RECALIBRATION
11	10/23/2013 10:00	10/23/2013 10:59	1.00	08 - NORMAL OPERATION 14 - RECALIBRATION
12	10/29/2013 08:00	10/29/2013 08:59	1.00	08 - NORMAL OPERATION 14 - RECALIBRATION
13	11/02/2013 09:00	11/02/2013 09:59	1.00	08 - NORMAL OPERATION 14 - RECALIBRATION
14	11/02/2013 13:00	11/02/2013 16:59	4.00	08 - NORMAL OPERATION 11 - EXCESS DRIFT PRIMARY ANALYZER
15	11/04/2013 06:00	11/04/2013 14:59	9.00	08 - NORMAL OPERATION 11 - EXCESS DRIFT PRIMARY ANALYZER
16	12/02/2013 06:00	12/02/2013 14:59	9.00	08 - NORMAL OPERATION 11 - EXCESS DRIFT PRIMARY ANALYZER
17	12/10/2013 08:00	12/10/2013 11:59	4.00	08 - NORMAL OPERATION 14 - RECALIBRATION
Comments: 4Q2013 H2S (ppm) Linearity Test				
18	12/26/2013 06:00	12/26/2013 10:59	5.00	08 - NORMAL OPERATION 11 - EXCESS DRIFT PRIMARY ANALYZER
		Number of Events:	18	
		Total Duration:	1,268.00 hours	

* Indicates duration incident could have additional data prior to the start date or following the end date.
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Attachment A

- Environmental Incident Reports
- Excess Emission Report Form for Sources with Continuous Emission Monitoring

Monroe Energy, L.L.C.
4101 Post Road
Trainer, PA 19061
(610) 364-8000

November 5, 2013

VIA EMAIL: jrebarchak@pa.gov

Mr. James Rebarchak
Program Manager – Air Quality Program
Pennsylvania Dept. of Environmental Protection
Southeast Regional Office
2 East Main Street
Norristown, PA 19401-4915

RE: Monroe Energy, LLC Trainer Refinery 2-Day and 10-Day Follow-up Report
Title V Operating Permit No. 23-00003

Dear Mr. Rebarchak:

The Monroe Energy, LLC Trainer Refinery is submitting this follow-up report to the Department in accordance with Title V Operating Permit No. 23-00003, Section C, Condition #016(c). This letter serves as both the required 2-business day and 10-business day follow-up report that summarizes the incident details and the notifications made on the evening of 11/01/2013.

Notification Summary				
Date:	**Time:**	**Agency Notified**	**Caller**	**Call Recipient**
11/01/2013	Approximately 11:30 PM	**PADEP** (484) 250-5900	Liz Lundmark	• Left Voicemail on Automated System. • No Return Call Received from PADEP.
Incidence Description:				
Event Description(s):	At approximately 9:15 PM, Substation No. 3 malfunctioned causing the Water Supply Pump House to lose power. The Pump House supplies cooling water to a number of units within the refinery. Because power to the Pump House would not immediately reset, a number of refinery operating units had to be safely shut down or placed into circulation (i.e., no feed to the unit) in a controlled and timely manner. During the transition to circulation, the FCCU exceeded its CO emission limit of 500 ppmvd @ 0% O_2 (1-hr average). Emission rates returned to normal once the transition to circulation was completed.			
Emission(s):	Emissions of CO, SO_2, and NO_X are directly measured via CEMS. Emissions of PM, PM_{10}, $PM_{2.5}$, and VOC are estimated using emission factors developed from stack testing conducted under normal conditions. The refinery was not able to identify any emission factors developed under the conditions experienced during the event and has assumed that the emission factors developed under normal operating conditions apply. Additional information and emission rates are provided in Table 1, attached.			

TABLE 1
Monroe Energy, LLC - FCCU Event Emission Summary Report

Event Start Date/Time	Event End Date/Time	Event Duration (hrs)	Brief Event Description	Operations During Event		Flare Emissions during Event [a]													
						Filterable PM		Filterable PM_{10}		Filterable $PM_{2.5}$		SO_2		NO_X		CO		VOC	
				Stack Flowrate (DSCFM)	Coke Burn Rate (ton/hr)	tons	Calc. Note	tons	Calc. Note	tons	Calc. Note	tons	Calc. Note	tons	Calc. Note	tons	Calc. Note	tons	Calc. Note
11/01/2013 21:00	11/01/2013 23:00	2.00	Loss of power to cooling water pump house resulted in FCCU shutdown.	159,471	7.9	0.005	(b)	0.005	(b)	0.005	(b)	0.002	(c)	0.055	(d)	0.081	(e)	0.001	(f)

[a] Emissions were estimated for the duration of the event assuming the following.

	Pollutant	Emission Factor	Units	Reference	Comments
(b)	Filterable PM / PM_{10} / $PM_{2.5}$	0.60	lb/ton coke	Stack Test	
(c)	SO_2	Continuous Emissions Monitoring System			
(d)	NO_X	Continuous Emissions Monitoring System			
(e)	CO	Continuous Emissions Monitoring System			
(f)	VOC	0.73	lb/hr	Stack Test	

Attachment A
Excess Emissions Summary for 3rd Quarter 2013

	Standard	Excess Emissions (% of Operating Time)	Comments
SRU - SO2	250 PPM	0.00%	SRU was in operation approixmately 92 days in this quarter.
Northside Fuel Gas -H2S	162 PPM	0.00%	Southside Fuel Gas was in operation approixmately 92 days in this quarter.
Southside Fuel Gas - H2S	162 PPM	0.00%	Northside Fuel Gas was in operation approixmately 92 days in this quarter.
FCC NOX	121/155 PPM	0.00%	FCC was in operations approximately 92 days in this quarter.
FCC SO2	50/25 PPM	0.00%	
FCC CO	500 PPM	0.32%	
FCC Opacity	L/G ratio per AMP	0.00%	
Sour Gas Flare - H2S	162 PPM	0.27%	The Sour Gas Flare was in operation 92 days in this quarter.
Main Flare - SO2	500 lb/day	0.00%	The Main Flare was in operation 92 days in this quarter.

The refinery monitors opacity in accordance with an approved Alternate Monitoring Plan which requires the refinery to monitor the liquid-to-gas ratio (L/G) of the FCC wet gas scrubber.